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EXAMINER	
KANE, CORDELIA P	
ART UNIT	**PAPER NUMBER**
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/509,089	HERON ET AL.	
	Examiner	Art Unit	
	CORDELIA KANE	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 28, 2008 have been fully considered but they are not persuasive. Applicant argues that Sit does not teach more than one controller nor the exchange of control messages between them. However, Sit discloses remote processor 157 and local processor 122. The CDMG sends a control message to remote processor 157 that lists the devices to be controlled (column 3, lines 63-67). The remote processor then sends a control message 171 to local processor 122 which then controls devices 110 (column 4, lines 3-9). These messages establish which devices to be controlled and then how to control them which is analogous to device control messages.

2. Applicant argues that Sit does not teach a device that is remotely controlled. However Sit teaches that message 170 causes response message 171 that controls device 110 (column 4, lines 4-9). These exchanges of messages makes it possible for remote processor 157 to remotely control devices 110.

3. Applicant argues that Crichton does not disclose all the limitations of claims 18, 30 and those dependent thereon. Applicants claimed first controller and second controller are interpreted as Crichton's server end proxy and client end proxy respectively. The separate device would be the XServer. So the client end proxy establishes a connection to the server end proxy (column 5, lines 54-60) and then the XClient sends device control messages to the client end proxy which then forwards them to the server end proxy that then controls the XServer (column 5, lines 17-25).

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

5. Claims 1 – 4, 12 – 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sit et al's Us Patent 6,349,336 B1. Referring to claim 1, Sit teaches:

a. A first controller connected to the network on the first network side for receiving control messages from a control station (column 3, lines 63-65).

b. A second controller connected to the network on the second network side, for receiving the device control messages from the first controller and controlling the operation of at least one device (column 4, lines 3-9).

c. Wherein the first controller is configured to send the device control messages to the second controller after initiation of a connection to the first controller by the second controller (column 4, lines 28-31).

6. Referring to claim 2, Sit teaches that the second controller initiates connection by sending a connection request to the first controller (column 3, lines 63-65).

7. Referring to claim 3, Sit teaches that the access control means is configured to prevent connection requests from the first controller from reaching the second controller (column 2, lines 23-25).

8. Referring to claim 4, Sit teaches that the connection is maintained between the first and second controllers following receipt of the connection request from the second controller, and to permit the first controller to send the device control messages to the second controller (column 4, lines 27-36).

9. Referring to claim 12, Sit teaches that the control station is configured to receive information relating to an event occurring at the devices via the first (column 4, lines 48-60) and second controller (column 4, line 64-column 5, line 1).

10. Referring to claim 13, Sit teaches that the control station generates device control messages in response to received information (column 4, lines 39-42).

11. Referring to claim 14, Sit teaches that the control station initiates a connection to the first controller to enable it to receive information (column 3, lines 53-65).

12. Referring to claim 15, Sit teaches that the first controller initiates a connection to the control station (column 4, lines 48-60).

13. Referring to claim 16, Sit teaches that the first controller is triggered to initiate the connection to the control station after initiation of the connection to the first controller by the second controller (column 3, lines 44-47).

14. Referring to claim 17, Sit teaches that the second controller controls one or more devices (column 3, lines 51-53).

15. Claims 18 – 20, 23 – 25, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Crichton et al's US Patent 6,104,716. Referring to claim 18, Crichton teaches:

d. Initiating a connection to a first controller from the second controller (column 5, lines 54-57).

e. Sending device control messages from the control station to the first controller and from the first controller to the second controller (column 5, lines 17-25).

16. Referring to claim 19, Crichton teaches:

f. A monitor station connected to the network for receiving information concerning the devices (column 5, line 28).

g. A first controller for receiving information and sending information to the monitor station (column 5, lines 17-25).

h. A second controller for monitoring operations of the device and sending information to the first controller (column 5, line 28). It is inherent that the data passes from the server proxy to the client proxy because that is how the tunnel is established.

i. Wherein the first controller is configured to send information to the monitor station after initiation of a connection to the first controller by the monitor station (column 5, lines 17-19).

17. Referring to claim 20, Crichton teaches that the system is configured to maintain a connection between the monitor station and the first controller and to permit the first controller to send information received to the monitor station without requesting a new connection (column 5, lines 17-29).

18. Referring to claim 23, Crichton teaches that the second controller is connected to the network on the second network side (column 4, lines 35-37).

19. Referring to claim 24, Crichton teaches that the first controller is located local to the monitor station and the second controller is located at a site remote from the monitor station (column 4, lines 30-37).

20. Referring to claim 25, Crichton teaches that the communications path between the monitor station and the remote site comprises a wide area network (Figure 4, Element 12).

21. Referring to claim 29, Crichton teaches that the monitor station and the first controller communicate over TCP (column 4, lines 24-31).

22. Referring to claim 30, Crichton teaches:

j. Initiating a connection to the first controller from the monitor station (column 5, lines 17-23).

k. Sending event information relating to operation of the device from the second controller to the first controller and then to the monitor station (column 5, line 28).

Claim Rejections - 35 USC § 103

23. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sit. Sit teaches all the limitations of the parent claims. Sit fails to disclose encrypting the device control messages. Examiner takes official notice that it is well known in the art to encrypt messages being sent across insecure channels. Therefor it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Sit to include encrypting the device control messages. The motivation for doing so would be to keep the messages secure over the insecure channel of the Internet.

24. Claims 6 – 9 are rejected under 35 USC 103 (a) as being obvious over Sit in view of Rudolf Wegener's US Publication 2003/0216891 A1. Sit discloses all the limitations of the parent claim. Sit does not explicitly disclose the control station being remote to both the first and second controller. However, Wegener discloses having the control station remote from both a first and second station (Figure 3). Sit and Wegener are analogous art because they are from the same field of endeavor, remotely controlling a device. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Sit and Wegener before him or her, to modify the system of Sit to include the remote control station of Wegener. The motivation for doing so would have been to reduce the amount of unacceptable delays (page 1, paragraph 3).

25. Referring to claim 7, Sit teaches a system wherein a communications path between the control station and the remote site comprises a wide area network (Figure 2, element 150).

26. Referring to claim 8, Sit teaches further access control means between the wide area network and the first controller (Page 2, lines 66-67).

27. Referring to claim 9, Sit teaches that the further access control means comprises a firewall (column 2, line 66).

28. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sit in view of Wegener, and further in view of Shaw. Sit in view of Wegener discloses all the limitations of the parent claim. Sit in view of Wegener does not explicitly disclose providing inner and outer firewall to the first controller with a demilitarized zone. However, Shaw discloses the use of having a controller (see Figure 1, element 102, and paragraph 0029) in a "demilitarized zone" between a first firewall (see Figure 1, element 100) (see Figure 1, element 102) and a second firewall (see Figure 1, element 100) which separates it from the wide area network (see Figure 1, element 104).

29. Hence, it would have been obvious to one of ordinary skill in the art to have included the technology taught by Shaw into the invention taught by Sit in view of Wegener above, to prevent unauthorized access to the first controller from the wide area network. In doing so would help ensure that the client complies with the security requirements, before allowing the client access to the network inside the inner firewall. Hence, to do so, would add an additional layer of security to the system (see paragraph 0026 of the Shaw reference).

30. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sit as applied to claim 1 above, and further in view of Crichton. Sit does not explicitly disclose that the first and second controllers communicate over TCP/IP. However, Crichton discloses that TCP/IP is the method used for communication in networks (column 1, lines 20-22). Crichton and Sit are analogous art because they are from the same field of endeavor, network communication. At the time of the invention, it would have been

obvious to one of ordinary skill in the art, having the teachings of Sit and Crichton before him or her, to modify the network of Sit to include the TCP/IP of Crichton. The motivation for doing so would have been to comply with compatible communication standards (column 1, 23-25).

31. Claims 21, 22 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crichton as applied to claims 19 and 30 above, and further in view of Sit. Referring to claims 21 and 31, Crichton discloses all the limitations of the parent claim. Crichton does not explicitly disclose that the monitor station generates device control messages in response to received information. However, Sit discloses that the monitor station generates device control messages in response to received information (column 4, lines 39-42). Crichton and Sit are analogous art because they are from the same field of endeavor, network communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Crichton and Sit before him or her, to modify the network of Crichton to include response to information of Sit. The motivation for doing so would have been so that an operator on a local processor needs assistance troubleshooting a device (column 4, lines 42-44).

32. Referring to claim 22, Crichton teaches that the device control message are sent to the devices via the first and second controllers (column 5, lines 17-25).

33. Claims 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crichton, and further in view of Shaw. Referring to claim 26, Crichton discloses all the

limitations of the parent claim. Crichton does not explicitly disclose providing inner and outer firewall to the first controller with a demilitarized zone. However, Shaw discloses the use of having a controller (see Figure 1, element 102, and paragraph 0029) in a "demilitarized zone" between a first firewall (see Figure 1, element 100) (see Figure 1, element 102) and a second firewall (see Figure 1, element 100) which separates it from the network (see Figure 1, element 104).

34. Hence, it would have been obvious to one of ordinary skill in the art to have included the technology taught by Shaw into the invention taught by Crichton above, to prevent unauthorized access to the first controller from the network. In doing so would help ensure that the client complies with the security requirements, before allowing the client access to the network inside the inner firewall. Hence, to do so, would add an additional layer of security to the system (see paragraph 0026 of the Shaw reference).

35. Referring to claim 27, Crichton teaches a third firewall between the second controller and the wide area network (Figure 4).

36. Referring to claim 28, Crichton teaches that the third firewall is configured to not permit inbound connection requests to the second controller (Figure 3).

37. Claim 32 is rejected under 35 USC 103 (a) as being obvious over Crichton in view of Kent Johnson et al's US Publication 2003/0120784 A1. Crichton discloses all the limitations of the parent claim, as well as:

l. That the first and second network sides are separated by a firewall and the first controller is located behind said firewall and the second controller is located outside the firewall (Figure 4).

m. Exchanging device control messages between said first and second controller (column 5, lines 17-25).

n. Using said first controller to control said devices (column 5, lines 39-40) using respectively corresponding signaling protocols in response to control messages from said second controller (column 5, lines 54-59).

38. Crichton does not explicitly disclose holding open a port, and using that port for communication. However, Johnson discloses holding a port open for data requests (page 4, paragraph 31). Crichton and Johnson are analogous art because they are from the same field of endeavor, remote communication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Crichton and Johnson before him or her, to modify the communication system of Crichton to include holding the port open of Johnson. The suggestion/motivation for doing so would have been security is easily maintained (page 4, paragraph 31).

Conclusion

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cordelia Kane/
Examiner, Art Unit 2132

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